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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,739	09/14/2006	Kazuhiro Hama	CU-4717 RJS	8712
26530	7590	09/13/2007		
LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1600 CHICAGO, IL 60604			EXAMINER ROBINSON, ELIZABETH A	
			ART UNIT 1773	PAPER NUMBER
			MAIL DATE 09/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/570,739

Applicant(s)

HAMA ET AL.

Examiner

Elizabeth Robinson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 2 is currently pending.

Claim Rejections - 35 USC § 112

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim states, "...and the bright ink layer contains a bright pigment includes a scaly foil of a bright substance and by curing," It is unclear if the bright pigment is the scaly foil or contains the scaly foil and other pigments. There appears to be wording missing between pigment and includes. The Examiner is interpreting the ending phrase, "by curing", to mean that the thermosetting resin is then cured.

Claim Rejections - 35 USC § 103

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Handforth in view of Schnee (US 3,936,547). Handforth (Column 2, lines 7 through 25) teaches printing an ink composition comprised of two polymers (A and B) and a pigment on a substrate. The substrate can be paper (Column 3, lines 43 through 51). When the substrate is paper, the primary polymer A can be a methyl methacrylate (an acrylic resin) (Column 4, lines 45 through 58). Polymer B can be a polyurethane-containing

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resin (urethane resin) (Column 3, lines 56 through 60). The pigment can be a pearlescent pigment, which the examiner is considering to be a scaly foil of a bright pigment (Column 9, lines 1 through 10). The ink can be printed on the paper using gravure printing (Column 5, lines 56 through 59). Handforth (Column 3, lines 3 through 12) further teaches that the urethane component in the ink binder is an adhesion promoter in an aqueous composition. Handforth does not teach impregnating the paper with a resin and curing. Schnee (Column 1, lines 40 through 43) teaches a process for impregnating paper with a melamine resin solution and then drying (curing). Melamines are thermoset resins. Schnee (Column 2, lines 58 through 65) further teaches that the impregnated paper can be a decorative paper. The melamine impregnation solution contains water or water-miscible solvents, in order to easily and deeply impregnate the paper substrate (Column 2, lines 1 through 7). It would be obvious to one of ordinary skill in the art to use the decorative paper of Handforth as the paper to be impregnated by the melamine resin of Schnee because the urethane binder would maintain adhesion of the ink in the aqueous melamine resin.

Response to Arguments

Applicant's arguments filed July 9, 2007 have been fully considered but they are not persuasive.

Applicant argues that the polymer (A) (which can be a methyl methacrylate polymer) is insoluble in water and thus a skilled person would know that it would be difficult to impregnate the printed material with a melamine resin solution. As evidenced

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by Garcia (US 3,578,483), it is known to impregnate a methyl methacrylate printed sheet with a melamine resin. Garcia (column 2, lines 32-47) teaches a coating composition, which is used as a base layer for further printing on a decorative sheet. The preferred binder of the coating composition is methyl methacrylate. This sheet is then impregnated with a melamine resin (Column 3, line 50 through Column 4, line 17). (Note: this is not a new rejection, but an answer to the Applicants argument.)

Applicant argues that Handforth does not disclose a bright ink layer simultaneously compromising an acrylic resin, a urethane resin and a bright pigment. In example 1(d) Handforth teaches an example comprising a water based resin, a urethane resin and a bright pigment. While the water based resin is not methyl methacrylate, the choice of resins (A), when the substrate is paper, is small and thus is envisioned by the teachings of Handforth. Further, as amended, the water based resin is no longer specified as an acrylic resin and thus Handforth directly teaches an ink composition, which meets the limitations of the claim.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Robinson whose telephone number is 571-272-7129. The examiner can normally be reached on Monday- Friday 8 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CAROL CHANEY
SUPERVISORY PATENT EXAMINER



ear

